

**PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants : OSIKA et al.

Appl. No. : To be assigned Examiner: To be assigned

Filed : Art Unit: To be assigned

For : IMPROVED UTILIZATION OF PHOSPHORUS
PENTASULFIDE IN THIONYLATIONS USING PHASE
TRANSFER CATALYSIS

Attorney Docket No.: 0151-CP

INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

Listed on the accompanying Form PTO-1449 are documents that may be considered material to the examination of this application and are submitted in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97, and 1.98. Copies of these documents are provided.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue.

The applicants reserve the right to establish the patentability of the claimed invention over any of the information provided by this statement, to prove that the enclosed information is not prior art, and/or to prove that this information is not enabling for the teachings purportedly offered.

Information Disclosure Statement
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This statement should not be construed as a representation that an exhaustive search has been made or that there does not exist information more material to the examination of the present patent application. The Examiner is specifically requested not to rely solely on the material submitted with this statement.

The applicants request that the examiner initial and return a copy of the enclosed Form PTO-1449 and indicate in the official file history of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 21-0525.

9/10/03
Date

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| FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u> | ATTY. DOCKET NO. 0151-CP | APPLICATION NO. To be assigned |
| | APPLICANTS OSIKA et al. | |
| | FILING DATE | GROUP To be assigned |

| U.S. PATENT DOCUMENTS | | | | | | | |
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| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA1 | 5,777,110 | Jul. 7, 1998 | Davis et al. | 544 | 2 | Aug. 24, 1994 |
| | AB1 | 5,965,749 | Oct. 12, 1999 | Brouwer | 549 | 57 | Mar. 16, 1998 |
| | AC1 | 6,372,297 | Apr. 16, 2002 | Davis et al. | 427 | 440 | Nov. 12, 1997 |
| | AD1 | | | | | | |
| | AE1 | | | | | | |
| | AF1 | | | | | | |

| FOREIGN PATENT DOCUMENTS | | | | | | | |
|--------------------------|-----|-----------------|------|---------|-------|-----------|-------------|
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | | 95/06043 | | WO | | | |
| | | 0715625 | | EP | | | |
| | AL1 | | | | | | Yes No |

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

Sudalai et al., A Mild and Versatile Catalyst/Reagent for the Preparation of Dithiocarboxylic Esters, Organic Letters, Vol. 2, No. 20, pages 3213-3216, (2000).

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Rao et al., A PTC Assisted Thionation: Synthesis of 2H-1,4-Benzoxazine-3(4H)-Thiones & 2H-1,4-Benzothiazine-3(4H)-Thiones, Synthetic Communications, 31(22), pages 3469-3472 (2001).

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| EXAMINER | DATE CONSIDERED |
| EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant. | |